

Application No: 10/550,769

Response to Final Office Action dated September 18, 2009

Amendment and Response dated October 29, 2009

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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the subject application, and please amend the claims as follows:

Claims 1-4. (Canceled)

Claim 5. (Previously presented): The nozzle according to claim 10, wherein means is provided to control the axial displacement of the pins.

Claim 6. (Previously presented): The nozzle according to claim 5, wherein in adjusting the effective cross section of the aperture the axially displaceable pins move the same distance in opposing directions.

Claim 7. (Previously presented): The nozzle according to claim 10, wherein the liquid passageway and cross member are circular.

Claim 8. (Previously presented): The nozzle according to claim 7, wherein the diameter of the liquid passageway is the same as the diameter of the cross member.

Claim 9. (Currently amended): The nozzle according to claim 6, further comprising two internally threaded blocks mounted on a threaded shaft, each block separately supporting ~~a one of the pins~~, whereby rotation of the shaft causes movement of the blocks to in turn displace the pins wherein:

each pin is coupled to one of the internally threaded blocks;

~~the [[a]]~~ shaft is in threaded engagement with both of the blocks, and

rotation of the shaft causes movement of the blocks such that each block causes displacement of the pins to which it is coupled.

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Claim 10. (Currently amended): A nozzle for producing a flat spray pattern, the nozzle comprising a T-piece having a leg and an elongate head pipe having a longitudinal axis, the leg comprising a pipe defining a liquid passageway and the head of the T-piece being a pipe positioned across the end of the liquid passageway, an aperture of fixed cross sectional area is positioned in the head of the T-piece aligned with the liquid passageway, the head pipe having two ends and having an internal curvature that defines two curved deflectors that converge towards the aperture to produce a flat spray pattern which is substantially parallel to the longitudinal axis of the head pipe, and a two pins each terminating in an end face, one pin being is positioned at one each end of the head pipe and the other pin being position at the other end of the head pipe with the pins being to be displaceable along the T-piece so that the end face of each pin can move across the aperture to vary the effective cross sectional area of the aperture.

Claim 11. (Original): The nozzle according to claim 10, wherein the pins are in screw threaded engagement with the head of the T-piece so that axial displacement of the pins across the aperture is effected by rotation of the pins.

Claim 12. (Withdrawn): Snowmaking equipment comprising at least one nozzle for producing a flat spray pattern, the nozzle comprising a water passageway terminating in a cross member having a wall having an outlet aperture of fixed cross sectional area, the wall of the cross member having an internal curvature that defines two deflectors that converge towards the aperture to deflect the water towards the aperture to produce a flat spray pattern; and the cross member supporting at least one axially displaceable pin adapted to move across the aperture to decrease or increase the effective cross sectional area of the aperture, the nozzle being inclined upwardly to, in use, project a plume of water droplets, the nozzle being positioned adjacent a jet of compressed air, the variation in the effective cross sectional area of the aperture reflecting the characteristics of the plume.

Claim 13. (Canceled)

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Claim 14. (Withdrawn): The snowmaking equipment according to claim 12, wherein the jet of compressed air is placed downstream of the nozzle.

Claim 15. (Withdrawn): The snowmaking equipment according to claim 14, wherein the jet of compressed air comprises an array of apertures.

Claim 16. (Withdrawn): The snowmaking equipment according to claim 15, wherein the width of the jet equates to the width of the plume of the water droplets.

Claim 17. (Withdrawn): The snowmaking equipment according to claim 12, wherein the plume of water droplets escaping from the nozzle is directed tangentially against the underside of the air jet.

Claim 18. (Withdrawn): The snowmaking equipment according to claim 12, wherein four flat jet water nozzles are positioned spaced apart in a horizontal plane, the spacing of the nozzles equating to the maximum width of each plume.

Claim 19. (Withdrawn): The snowmaking equipment according to claim 12 wherein the water nozzle, nozzles and jet or jets of compressed air are supported on a head, the head being pivotally inclined to a self standing mast.

Claim 20. (Withdrawn): The snowmaking equipment according to claim 19 wherein the mast is rotatable about a vertical axis.

Claim 21. (Withdrawn): The snowmaking equipment according to claim 19, wherein the head is vertically adjustable relative to the mast whilst maintain the angle of inclination of the water nozzle and air jet.

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Claim 22. (Withdrawn): The snowmaking equipment according to claim 19, wherein the head includes four nozzles spaced so that the plumes meet at their widest points.

Claims 23-24. (Canceled)

Claim 25. (Previously presented): The nozzle according to claim 10, wherein the end face of each of said pins is a flat end face.